IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (original) An information recording apparatus for recording a stream of packets describing encoded image data in a predetermined format in a storage device, said apparatus comprising:

identification means for identifying said packet containing a start part of said encoded image data subjected to intra-frame coding from said input stream of packets;

addition means for adding to said packet presence or absence information of the start part of said encoded image data subjected to intra-frame coding on the basis of an identified result;

counting means for counting the added presence or absence information of the start part in a recording unit onto said storage device; and

count result addition means for adding a count result in said recording unit onto said storage device.

2. (original) The information recording apparatus according to claim 1 wherein

said addition means adds the presence or absence information of the start part of said encoded image data to said packet on a channel basis; said count means counts the presence or absence information of the start part for each channel; and said count result addition means adds the count result for each channel in said recording unit on a channel basis.

3. (currently amended) An information reproducing apparatus for reproducing a stream of packets describing encoded image data in a predetermined format from a storage device where said stream of packets is recorded in a predetermined recording unit with a plurality of recording units being recorded in a cluster, said apparatus comprising:

reproducing means for reproducing clusters of recording units ~~said recording unit~~ containing packets, at least one of said recording units containing a start part of ~~said~~ encoded image data subjected to intra-frame coding on the basis of the information of said start part added in said recording unit, the encoded image data including

an identifier for identifying said packets containing said start part, for identifying presence or absence information identifying the presence or absence of said encoded image data subjected to intra-frame coding and for identifying a count representing the number of encoded image data subjected to intra-frame encoding in said cluster; and

skip playback means for reproducing said recording unit containing at least the start part, and then skipping a predetermined number of recording units to detect ~~the information of the~~ a start part ~~added~~ in a subsequent cluster.

4. (currently amended) The information reproducing apparatus according to claim 3 wherein

the information ~~of~~ associated with said start part is added to said recording unit on a channel basis of said encoded image data; and said reproducing means detects the information of said start part in the channel for reproduction.

5. (original) An information recording/reproducing apparatus for recording and reproducing a stream of packets describing encoded image data in a predetermined format in and from a predetermined storage device, said apparatus comprising:

identification means for identifying said packet containing a start part of said encoded image data subjected to intra-frame coding from said input stream of packets;

addition means for adding to said packet presence or absence information of the start part of said encoded image data subjected to intra-frame coding on the basis of an identified result;

counting means for counting the added presence or absence information of the start part in a recording unit onto said storage device;

count result addition means for adding a count result in said recording unit onto said storage device to record on said storage device;

reproducing means for reproducing said recording unit recorded on said storage device on the basis of said count result added in said recording unit and recorded on said storage device; and

skip playback means for reproducing said recording unit containing at least said start part, and then skipping a predetermined number of recording units to detect the information of said start part added.

6. (original) The information recording/reproducing apparatus according to claim 5 wherein

said addition means adds the presence or absence information of the start part to said packet on a channel basis of said encoded image data;

said count means counts the presence or absence information of said start part for each channel;

said count result addition means adds the count result for each channel in said recording unit on said channel basis; and

said reproducing means reproduces said recording unit for a channel for reproduction on the basis of a result of detecting the information of said start part in said channel for reproduction.

7. (original) An information recording method for recording a stream of packets describing encoded image data in a predetermined format in a storage device, said method comprising the steps of:

identifying said packet containing a start part of said encoded image data subjected to intra-frame coding from said input stream of packets;

adding to said packet the presence or absence information of the start part of said encoded image data subjected to intra-frame coding on the basis of an identified result;

counting the added presence or absence information of said start part in a recording unit onto said storage device; and

adding said count result in said recording unit onto said storage device.

8. (original) The information recording method according to claim 7 wherein

said step of adding the presence or absence information of the start part of said encoded image data subjected to intra-frame coding to said packet involves adding the presence or absence information of said start part to said packet on a channel basis of said encoded image data;

said step of counting the presence or absence information of said start part added in said recording unit onto said storage device involves counting the presence or absence information of said start part for each channel; and

said step of adding the count result in said recording unit involves adding the count result for each channel in said recording unit on said channel basis.

9. (currently amended) An information reproducing method for reproducing a stream of packets describing encoded image data in a predetermined format from a storage device where said stream of packets is recorded in a predetermined recording unit with a plurality of recording units being recorded in a cluster, said method comprising the steps of:

reproducing clusters of recording units containing packets, at least one of said recording ~~unit~~ units containing a start part of ~~said~~ encoded image data subjected to intra-frame coding on the basis of the information of said start part added in said recording unit, the encoded image data including

an identifier for identifying said packets containing said start part, for identifying presence or absence information identifying the presence or absence of said encoded image data subjected to intra-frame coding and for identifying a count representing the number of encoded image data subjected to intra-frame encoding in said cluster; and

detecting the information of the start part added by skipping a predetermined number of recording units, after reproducing said recording unit containing at least said start part.

10. (currently amended) The information reproducing method according to claim 9 wherein

the information ~~of~~ associated with said start part is added to said recording unit on a channel basis of said encoded image data, and

said step of reproducing said recording unit containing the start part of said encoded image data subjected to intra-frame coding on the basis of the information of said start part added in said recording unit involves detecting the information of said start part in a channel for reproduction.

11. (original) An information recording/reproducing method for recording and reproducing a stream of packets describing encoded image data in a predetermined format in a predetermined storage device, said method comprising the steps of:

identifying said packets containing a start part of said encoded image data subjected to intra-frame coding from said input stream of packets;

adding to said packet presence or absence information of the start part of said encoded image data subjected to intra-frame coding on the basis of an identified result;

counting the added presence or absence information of said start part in a recording unit onto said storage device;

adding said count result in said recording unit onto said storage device to record on said storage device;

reproducing said recording unit recorded on said storage device on the basis of said count result added in said recording unit and recorded on said storage device; and detecting the information of said start part added by skipping a predetermined number of recording units after reproducing said recording unit containing at least said start part.

12. (original) The information recording/reproducing method according to claim 11 wherein

the step of adding the presence or absence information of the start part of the encoded image data subjected to said intra-frame coding to said packet involves adding the presence or absence information of the start part to said packet on a channel basis of said encoded image data;

the step of counting the presence or absence information of said start part added in said recording unit onto said storage device involves counting the presence or absence information of said start part for each channel; the step of adding the count result in said recording unit onto said storage device to record onto said storage device involves adding the count result for each channel in said recording unit on said channel basis; and

the step of reproducing said recording unit recorded on said storage device on the basis of said count result added in said recording unit and recorded on said storage device involves detecting the information of said start part in a channel for reproduction and reproducing said recording unit of said channel on the basis of a detected result.

13. (original) An digital broadcasting receiving apparatus for receiving a stream of packets describing encoded image data in a predetermined format transmitted from a

broadcasting station and recording said stream in a predetermined built-in storage device, said apparatus comprising:

identification means for identifying said packet containing a start part of said encoded image data subjected to intra-frame coding from said received stream of packets;

addition means for adding to said packet presence or absence information of the start part of said encoded image data subjected to intra-frame coding on the basis of an identified result; counting means for counting the added presence or absence information of the start part in a recording unit onto said storage device; and

count result addition means for adding a count result in said recording unit onto said storage device.

14. (original) The digital broadcasting receiving apparatus according to claim 13 wherein

said storage device is an HDD.

15. (original) The digital broadcasting receiving apparatus according to claim 13

wherein said addition means adds the presence or absence information of the start part of said encoded image data to said packet on a channel basis;

said count means counts the presence or absence information of the start part for each channel; and

said count result addition means adds the count result for each channel in said recording unit on a channel basis.

16. (currently amended) A digital broadcasting receiving apparatus for receiving a stream of packets describing encoded image data in a predetermined format transmitted from a broadcasting station and reproducing said stream from a storage device where said stream is recorded in a predetermined recording unit with a plurality of recording units being recorded in a cluster, said apparatus comprising:

reproducing means for reproducing clusters of recording units containing packets, at least one of said recording ~~unit~~ units containing a start part of ~~said~~ encoded image data subjected to intra-frame coding on the basis of the information of said start part added in said recording unit, the encoded image data including

an identifier for identifying said packets containing said start part, for identifying presence or absence information identifying the presence or absence of said encoded image data subjected to intra-frame coding and for identifying a count representing the number of encoded image data subjected to intra-frame encoding in said cluster; and

skip playback means for reproducing said recording unit containing at least the start part, and then skipping a predetermined number of recording units to detect ~~the information of the~~ a start part ~~added~~ in a subsequent cluster.

17. (original) The digital broadcasting receiving apparatus according to claim 16 wherein said storage device is an HDD.

18. (currently amended) The digital broadcasting receiving apparatus according to claim 16

wherein the information ~~of~~ associated with said start part is added to said recording unit on a channel basis of said encoded image data; and said reproducing means detects the information of said start part in the channel for reproduction.

19. (original) A digital broadcasting receiving apparatus for receiving a stream of packets describing encoded image data in a predetermined format transmitted from a broadcasting station, and recording and reproducing said stream in and from a predetermined storage device, said apparatus comprising:

identification means for identifying said packet containing a start part of said encoded image data subjected to intra-frame coding from said received stream of packets;

addition means for adding to said packet presence or absence information of the start part of said encoded image data subjected to intra-frame coding on the basis of an identified result;

counting means for counting the added presence or absence information of the start part in a recording unit onto said storage device; count result addition means for adding a count result in said recording unit onto said storage device to record on said storage device;

reproducing means for reproducing said recording unit recorded on said storage device on the basis of said count result added in said recording unit and recorded on said storage device; and

skip playback means for reproducing said recording unit containing at least said start part, and then skipping a predetermined number of recording units to detect the information of said start part added.